

In the Claims

1. (currently amended) A method for performing device address assigning functionality in an intelligent data concentrator, said method comprising:

- receiving a network access request from a client device communicatively coupled to said intelligent data concentrator;
- transmitting a device address request to an Ethernet local area network (LAN) server communicatively coupled to said intelligent data concentrator;
- receiving a first device address from said Ethernet LAN server communicatively coupled to said intelligent data concentrator; and
- assigning a second device address to said client device communicatively coupled to said intelligent data concentrator;

wherein said intelligent data concentrator is configured to be mounted internally within a wall such that a user-accessible surface of the intelligent data concentrator is external to and substantially planar with an exterior surface of the wall to provide direct access to said intelligent data concentrator; and

wherein said intelligent ~~hardware~~ data concentrator comprises:

- a first interface for communicatively coupling said intelligent ~~hardware~~ data concentrator to a network, said network comprising said Ethernet LAN server;
- a second interface for communicatively coupling said intelligent ~~hardware~~ data concentrator to a plurality of said client devices such that each said client device is communicatively coupled to said Ethernet LAN;
- a processor coupled to said first interface and said second interface;

and

a device address retriever coupled to said processor.

2. (cancelled)

3. (previously presented) A method as recited in Claim 1 wherein said first device address and said second device address are IP addresses.

4. (original) A method as recited in Claim 1 wherein said Ethernet LAN server comprises a DHCP server.

5. (original) A method as recited in Claim 1 wherein said first device address is the same as said second device address.

6. (original) A method as recited in Claim 1 wherein said first device address is a global device address.

7. (original) A method as recited in Claim 1 wherein said second device address is a private device address.

8. (currently amended) A method for performing device address assigning functionality in an intelligent data concentrator, said method comprising:
receiving a network access request from a client device
communicatively coupled to said intelligent ~~hardware~~ data concentrator, said intelligent data concentrator having a first device address, wherein said intelligent data concentrator is configured to be mounted internally within a wall such that a user-accessible surface of the intelligent data concentrator is

external to and substantially planar with an exterior surface of the wall to provide direct access to said intelligent data concentrator; and

assigning a second device address to said client device communicatively coupled to said intelligent data concentrator, such that said intelligent data concentrator eliminates the need for a separate device address assigning server; and

wherein said intelligent data concentrator comprises:

a first interface for communicatively coupling said intelligent data concentrator to an Ethernet local area network (LAN);

a second interface for communicatively coupling said intelligent data concentrator to a plurality of said client devices such that each said client device is communicatively coupled to said Ethernet LAN;

a processor coupled to said first interface and said second interface; and

a device address assignor coupled to said processor.

9. (cancelled)

10. (original) A method as recited in Claim 8 wherein said first device address and said second device address are IP addresses.

11. (previously presented) A method as recited in claim 8 wherein said device address assignor is a DHCP server.

12. (original) A method as recited in Claim 8 wherein said first device address is the same as said second device address.

13. (original) A method as recited in Claim 8 wherein said first device address is a global device address.

14. (original) A method as recited in Claim 8 wherein said second device address is a private device address.

15. - 20. (cancelled)

21. (previously presented) An intelligent data concentrator for performing device address assigning functionality, said intelligent data concentrator having a first device address, said intelligent data concentrator comprising:

- a housing configured to be installed internally within a wall;

- a first interface for communicatively coupling said intelligent data concentrator to an Ethernet local area network (LAN);

- a second interface for communicatively coupling said intelligent data concentrator to a plurality of client devices such that each said client device is communicatively coupled to said network, wherein said second interface is external to and substantially planar with an external surface of the wall to provide a plurality of communication ports, each communication port providing the communicative coupling for one of the plurality of client devices;

- a processor coupled to said first interface and said second interface;

and

- a device address assignor coupled to said processor for assigning a second device address to said client device;

- wherein said first interface, said second interface, said processor and

said device address assignor are comprised within said housing.

22. (previously presented) An intelligent data concentrator as recited in Claim 21 wherein said first device address and said second device address are IP addresses.

23. (previously presented) An intelligent data concentrator as recited in Claim 21 wherein said device address assignor is a DHCP server.

24. (previously presented) An intelligent data concentrator as recited in Claim 21 wherein said first device address is the same as said second device address.

25. (previously presented) An intelligent data concentrator as recited in Claim 21 wherein said first device address is a global device address.

26. (previously presented) An intelligent data concentrator as recited in Claim 21 wherein said second device address is a private device address.